Recombinant Mouse IFN alpha 1a protein(His Tag)

Catalog Number: PKSM041492

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

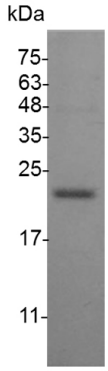
Description

Species	Mouse
Source	E.coli-derived Mouse IFN alpha 1a protein Cys 24-Lys 189, with an N-terminal His
Calculated MW	19.9 kDa
Observed MW	17-25 kDa
Accession	P01572
Bio-activity	Measure by its ability to protect L929 cells infected with encephalomyocarditis (EMC) virus. The ED_{50} for this effect is <10 pg/mL. The specific activity of recombinant mouse IFN alpha 1a is > 4 x 10^7 IU/mg.

Properties

Purity	> 98 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.1 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 98 % as determined by reducing SDS-PAGE.

Background

IFNA1, also known as IFN-alpha and IFNA, belongs to the alpha/beta interferon family. Interferons(IFNs) are proteins made and released by host cells in response to the presence of pathogens such as viruses, bacteria, parasites, or tumor cells. They belong to the large class of glycoproteins known as cytokines. IFNs stimulate the production of two enzyme s: a protein kinase and an oligoadenylate synthetase. They allow for communication between cells to trigger the protective defenses of the immune system that eradicate pathogens or tumors. IFNs can activate immune cells, such as natural killer cells and macrophages; they increase recognition of infection or tumor cells by up-regulating antigen presentation to T lymphocytes, and they also increase the ability of uninfected host cells to resist new infection by the virus. Leukocyte interferon is produced predominantly by B lymphocytes. Immune interferon is produced by mitogen- or antigen-stimulated T lymphocytes. IFNA1 is produced by macrophages and has antiviral activities.